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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,360	09/08/2003	Michael Y. Wen	2000.110A	9508

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EXAMINER	
SINGH, PREM C	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
06/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/657,360	**Applicant(s)** WEN, MICHAEL Y.	
	Examiner PREM C. SINGH	**Art Unit** 1797	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 May 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *13-41*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Glenn A Caldarola/
Acting SPE of Art Unit 1797

Continuation of 11. does NOT place the application in condition for allowance because: The Applicant argues that first of all McKinney fails to teach or suggest the process as disclosed in the claims of the application. Second, Applicants rebut the Examiner's argument that "McKinney teaches that it may be desired to send the hydrogen containing gas to the cracking step." Third, McKinney is not combinable with either of Khan or Gomi. For at least these reasons and the previously provided reasons, Applicants respectfully request allowance of claims 13-18, 20-21, 24-27, and 34-41.

The Applicant's argument is not persuasive because McKinney discloses steps (a) and (b) of claim 13 (See McKinney, column 4, lines 26-41 and claims 1-10). McKinney does not specifically disclose step (c),i.e.,stabilization of quenched oil product. Gomi discloses stabilization of cracked product as per claim 13 (c) (See Gomi, column 3, lines 10-30).It is to be noted that the examiner quotes from McKinney, "Hydrodesulfurization effluent may be flashed, IF DESIRED, prior to thermal cracking" (McKinney: column 12, lines 31-32). McKinney further discloses that hydrodesulfurization effluents comprise hydrogen (See McKinney: column 14, lines 39-42.In other words, if hydrodesulfurization effluent is not flashed, hydrogen will necessarily go to the cracking step. It is further to be noted that McKinney claim 16 reads, "The process of claim 1, wherein hydrogen produced in the cracking zone is recycled to the hydrodesulfurization zone" (Column 17, lines 3-5). Gomi and Khan substantiate step (c) of the claimed invention which is not specifically disclosed by McKinney. Thus, one skilled in the art would combine the three inventions to achieve the claimed invention.

The Applicant argues that McKinney uses hot solids instead of gas for cracking.In contrast, the application provides a process wherein "heavy oil is rapidly cracked and vaporized once it contacts hot syngas [and] the majority of the heavy oil in the eduction nozzles goes through gas phase cracking reactions." Para. [0059]. The process of McKinney heats the oil using hot solids, while the process of the invention heats the oil using gas. Claim 13 of the application discloses thermal cracking in the presence of a hydrogen containing gas and claim 15 of the application states that the thermal cracking reaction is "predominantly a gas phase thermal cracking reaction." The Examiner has not addressed these differences between the application and the prior art. For at least these reasons, McKinney fails to teach or suggest the thermal cracking step of the process of the present invention and claims 13 and 15 are patentable over McKinney.

The Applicant's argument is not persuasive because limitations in para [0059] have not been claimed. The claim(s) only require "cracking in presence of hydrogen-containing gas". McKinney invention fully discloses this limitation. It is also to be noted that McKinney uses diluent gas, like steam, during cracking (See claim 2, column 16, lines 23-24). Thus, McKinney should necessarily achieve "predominantly gas phase thermal cracking reaction".

The Applicant argues that McKinney is not combinable with either Khan or Gomi.

The Applicant's argument is not persuasive because as discussed earlier, McKinney discloses steps (a) and (b) and the other two references only substantiate McKinney for step (c). Thus, the three arts are combinable.

/Glenn A Caldarola/
Acting SPE of Art Unit 1797